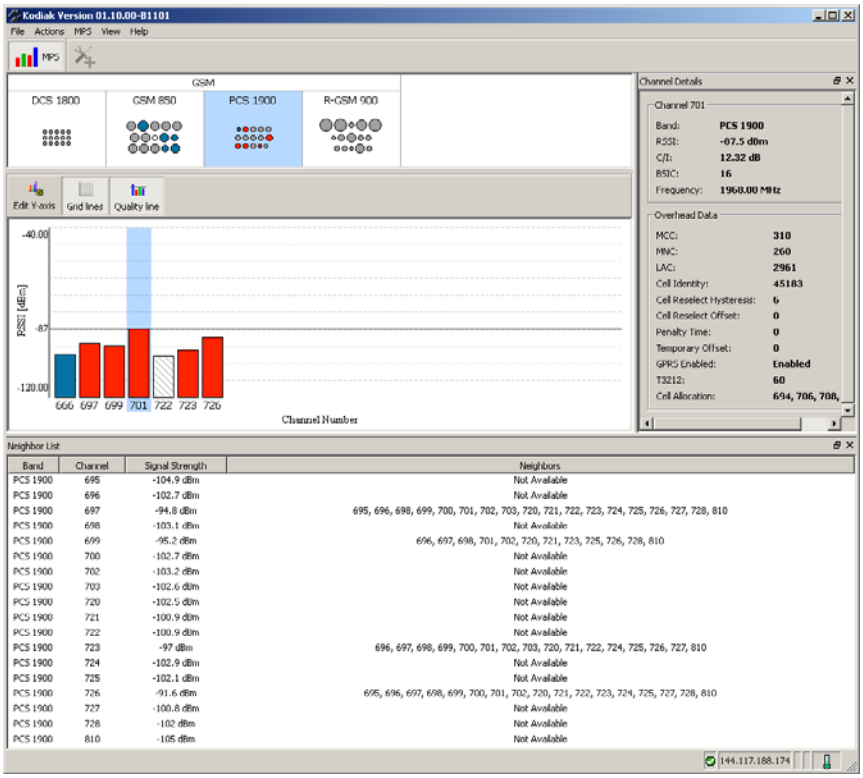
Digital Receiver Technology, Inc.

Approved for Public Release

DRT4000B MPS



DESCRIPTION

DRT4000B MPS – Multi-Protocol Survey Application

The DRT4000B/MPS (Multi-Protocol Survey) application is an easy-to-use survey tool used to detect and characterize active cellular networks. By simultaneously supporting a number of modern 2G, 3G and 4G technologies including GSM, cdma2000, 1xEV-DO, UMTS WCDMA, TD-SCDMA and LTE, the MPS application facilitates a rapid assessment of the network environment. Insights gained through an accurate survey facilitate mapping the network topology and help establish requirements for sustained operations.

The intuitive user interface allows the operator to quickly select predefined frequency / technology band definitions for survey (which cover a majority of worldwide commercial networks deployments). For those instances when a predefined configuration does not cover the band of interest, the operator can also customize the survey parameters. Survey results are presented using a variety of visualization methods that allow the operator to quickly understand the network environment. Additional network details are provided through decoded overhead parameters providing even greater insights. A spectrum analyzer facility provides tools for spectrum analysis.

Overall, the MPS application provides a robust set of tools for detection and analysis of a variety of modern signal technologies.

Features

- Simultaneous 2G/3G/4G support
- GSM / cdma2000 / WCDMA / TD-SCDMA / LTE
- High-Performance Physical Layer Measurements
- Integrated Overhead Decode
- Predefined & Customized Survey Parameters
- Integrated Spectrum Analyzer
- Sampled IF for Off-Line Analysis
- Intuitive Wizard Based User Interface

Specifications

Supported Devices	DRT4411B/B-R, DRT4413B/B-R

GSM

Measurements:	RSSI, BSIC, C/I
BSIC Scan Rate:	50 Channels / Sec
Overhead Decode:	BSIC, Cell ID, Cell Allocation Parameters, RACH Parameters, Cell Selection Parameters, Neighbor Cell Info, AGCH Info

cdma2000 1xEV-DO

Measurements:	PN Offset, Ec/Io, Delay, Delay Spread
Pilot Scan Rate:	50 Channels / Sec
Overhead Decode:	Sync Information, Paging Information, Paging Channel Access Information, Extended Paging Information

UMTS WCDMA

Measurements:	Scrambling Code, Ec/Io, Delay, Delay Spread
Pilot Scan Rate:	25 Channels / Sec
Overhead Decode:	MIB, SIB's 1, 3, 5, 7, 11, 18, 19

TD-SCDMA

Measurements:	DwPTS:RSSI, Ec/Io, P-CCPCH:C/I, Ec/Io, TS0 RSSI, Time Offset, Delay Spread, Cell Scrambling Code
Pilot Scan Rate:	200 Channels / Sec

LTE

Supported BW:	1.4, 3, 5, 10 ,15, 20 MHz
Measurements:	BCHRP, SCHRP, SCH CINR, RSRP, RSRQ, RS CINR
Measurement Rate:	50 Channels / Sec
Overhead Decode:	Cell Id, BCH, SIB-Type 1

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